

SCAMIT Code: AHF 43

Date Examined: 8 June 1987

Voucher by: Leslie H. Harris (AHF)

SYNONYMY: Schistocomus hiltoni of Hartman, 1969 (not Chamberlin, 1919)

LITERATURE: Hartman, 1969
Fauchald (in Word and Charwat), 1975
Chamberlin, 1919

DIAGNOSTIC CHARACTERS:

1. Fifteen thoracic setigers, twelve thoracic uncinigers.
2. Paleae absent.
3. Four pairs of branchiae, 1st cirriform, other three bipinnate.
4. Abdominal parapodia each with papilliform notopodial rudiment at base and small dorsal cirrus subdistally.
5. Oral tentacles smooth.
6. Two distinct pairs of anal cirri, ventral pair longer than dorsal pair; and circlet of papillae.
7. Cephalic area stains uniformly dark with methyl green, except for nuchal organs which go unstained (Fig. 1).

LOCAL SPECIES AND CHARACTER DIFFERENCES:

1. Schistocomus hiltoni Chamberlin, 1919: branchiae consist of cirriform 1st pair, uni-pinnate 2nd, and bipinnate 3rd and 4th; pygidium has one large pair of ventral cirri, dorsal pair absent or barely longer than circlet of papillae; cephalic area with large median unstained patch (Fig. 2).

REMARKS:

Three pairs of bipinnate branchiae are described and illustrated for Schistocomus hiltoni in the Atlas (Hartman, 1969). This branchial arrangement is diagnostic for the provisional species described herein, Schistocomus sp. A and not for Schistocomus hiltoni Chamberlin, 1919. Fauchald (1975) correctly

stated that the illustrations were of an undescribed species of Schistocomus. However, he also incorrectly stated that the description given was of S. hiltoni. The description given in the Atlas (Hartman, 1969) is for Schistocomus sp. A.

The branchiae of Schistocomus sp. A develop pinnae slowly and reach their characteristic configuration when the worm is 8-9 mm long (Table 1). However, even the smallest specimens can be identified by the methyl green stain pattern of the cephalic area.

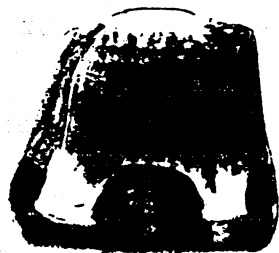
DISTRIBUTION:

Schistocomus sp. A has definitely been found off Goleta, in the San Pedro channel, and off Point Loma. S. hiltoni has been reported from Vancouver Island through southern California, in intertidal and shelf depths, into canyons in shallow depths. The true distribution of both these species is uncertain because of confused identifications.

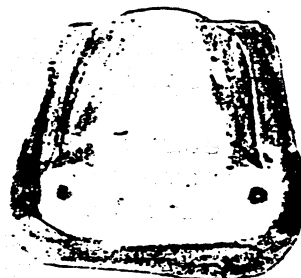
TABLE 1.

Branchiae development in Schistocomus sp. A, based on juveniles collected at Goleta in 73-93 ft.

Specimen Length	1st	2nd	3rd	4th
4mm	cirriform	bipinnate (barely)	cirriform	absent/cirriform
5mm	"	bipinnate	"	"
6mm	"	"	pinnate	"
7mm	"	"	"	"
8mm	"	"	bipinnate	bipinnate (barely)
9mm	"	"	"	bipinnate



S. sp. A



S. hiltoni

a

b

Figure 1

Methyl green stain pattern of the cephalic area of:

a. Schistocomus sp. A

b. Schistocomus hiltoni Chamberlin, 1919